

Before the  
Federal Communications Commission  
Washington, DC 20554

In the Matter of	)	
	)	
Notice of Proposed	)	ET Docket 98 - 95
Rulemaking - Allocation	)	
of 5.850 - 5.925 GHz to	)	
Intelligent Transportation	)	
Systems (ITS)	)	

To: The Commission

**Comments of Nickolaus E. Leggett, N3NL  
Amateur Extra Class Radio Operator**

The following comments are submitted by Nickolaus E. Leggett who is a licensed amateur radio operator of over 30 years experience. My call sign is N3NL and I hold the Amateur Extra Class radio license.

I think that the Intelligent Transportation Systems (ITS) are a good idea that will help improve highway safety.

However, the proposed frequency range of 5.850 through 5.925 GHz is the wrong frequency band for this new service. Since the ITS is a very short range service from the road side to passing vehicles, ITS can use even higher frequencies quite efficiently. These frequencies include the plentiful frequencies available at and above 40 GHz. These frequencies offer very wide bandwidth transmissions (high data rates) that would allow masses of data to be quickly transferred between passing motor vehicles and the roadside transceivers.

Many of the ITS functions can be transmitted at light wave frequencies. An example of this is automatic toll taking. Infrared transmission will carry the data even through rain and fog. These infrared frequencies offer truly huge bandwidths and are completely unallocated. As a result of this, the Intelligent Transportation Society of America is able to develop and use infrared to whatever extent they want to.

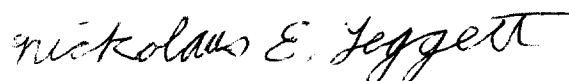
It is in the Commission's direct interest to urge users such as ITS up to the higher

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frequencies. These higher frequencies provide much greater bandwidth than the lower frequencies such as the 5.9 GHz region. This is the basic geometry of the electromagnetic spectrum. The higher frequencies allow new users to develop and grow without impacting the existing users.

The Amateur Radio Service use of 5.650 to 5.925 GHz must be protected. Amateur Radio operators create operating knowledge and inventions that are useful to industry and to the entire economy. The microwave allocations are a frontier for amateur radio. This has included recent 5.7 GHz earth-moon-earth communications between the United States and Russia (QST magazine August 1998 P. 91). Amateur radio should not be swept off the band as 3M Corporation proposed. Leave us there with some protected frequencies so that we can continue our explorations.

Respectfully submitted,



Nickolaus E. Leggett

Dated: August 1, 1998

1432 Northgate Square, Apt. 2A  
Reston, VA 20190-3748  
(703) 709-0752